

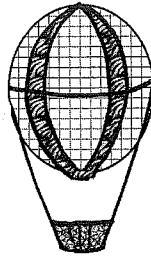
1. In an unusual display of human endurance, Eufermina Stadler ironed for 40 hours without stopping. In that time, she ironed 228 sheets. At that rate, how long did it take her to iron 171 sheets?

2. How many variables are found in this expression?

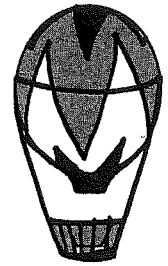
$$n - 2n^2 + 5n^3 + 7n$$

3. Simplify:  $7\sqrt{27} - 3\sqrt{12}$

4. Circle the irrational numbers below.



5. Mike Howard of the United Kingdom can be proud of his amazing achievement. He walked on a beam suspended between two hot air balloons at an altitude of 21,400 feet.



What is the approximate altitude in meters?

Answer:

$\sqrt{7}$   $\sqrt[3]{8}$  **52**  $\sqrt{10}$   $\frac{1}{160}$  4.101

1. Evaluate for  $x = -2$

$$(x + 1)(x + 2)(x - 3)$$

2. In a most unusual human feat, Garry Turner clipped a record-breaking number of clothespins to his face at one time. To find the number, simplify:

$$\sqrt[3]{216} + 3^5 - (2 \cdot 3^2 \cdot 5)$$

3. Circle the correct solution for the following number sentence.

$$28 \quad -28 \quad -22 \quad 22 \quad 75 \quad -75$$

$$-25 - (-3) + 16 - 16 =$$

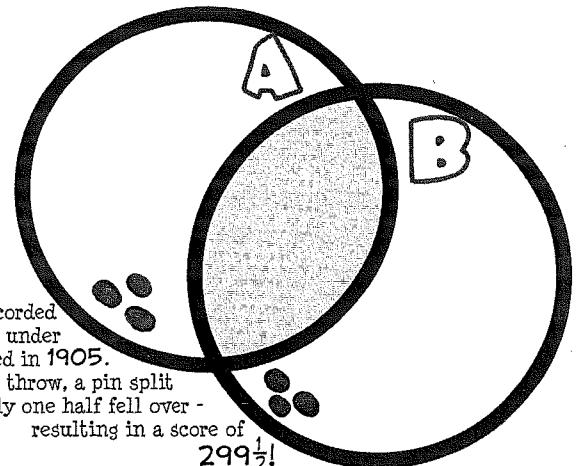
4. Use words to write this equation:

$$35 = p + (-2q)$$

5. Represent sets A and B in the Venn diagram.

$$A = \{-6, \frac{2}{3}, 6.75, -30, \sqrt[3]{-64}, \frac{1}{2}, 8, 42\}$$

$$B = \{-8, -\frac{1}{2}, \frac{1}{2}, 5.44, -3, 42, 6.75\}$$



The highest recorded bowling score under 300 occurred in 1905.

On the last throw, a pin split and only one half fell over - resulting in a score of 299½!

1. Simplify:

$$3y(15 + 5) - 2y(3 - 2) + \frac{12y + 6}{3}$$

2. In an astounding show of strength, Thomas Blackthorne lifted 24 lb, 3 oz of weight with his tongue. In kilograms, this weight is closest to:

48 kg    96 kg    9 kg    11 kg    109 kg

3. Multiply:  $(2w^2)(3w^6)$

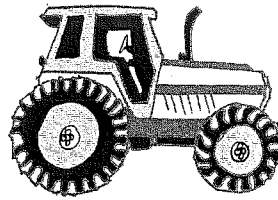
4. Which solution has a greater value if  $p$  is a negative number?

a.

$$3p + 4 - 6$$

b.

$$(p)(p) - 1$$



5. Write and solve an equation to answer the question.

A record-setting journey on a tractor covered 3,425 miles from June 12 to July 5, 2004. Assuming the driver traveled 12 hours a day and rested five of the days, what was the rate of travel (miles per hour rounded to the nearest tenth)?

1. Write the prime factors of twenty-eight.

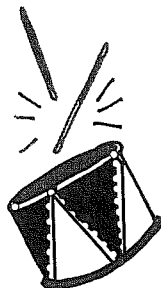
2. Simplify and solve:

$$\frac{1}{2}x \geq 3$$

3. What is  $x$  in the equation below?

$$\sqrt[x]{125} = 5$$

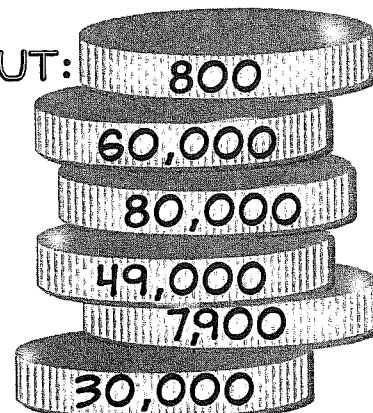
4. Drummer Oliver Butterworth set a record for the most drumbeats per minute: one thousand eighty. Four-fifths of this number is seventeen less than half of another number of drum beats (b).



5. A group of school children in the UK laid down a row of 79,200 pennies in 2 hours, 42 minutes, and 29 seconds. At that rate, about how many pennies did they lay down in 1 hour and 40 minutes?

Choose the closest answer.

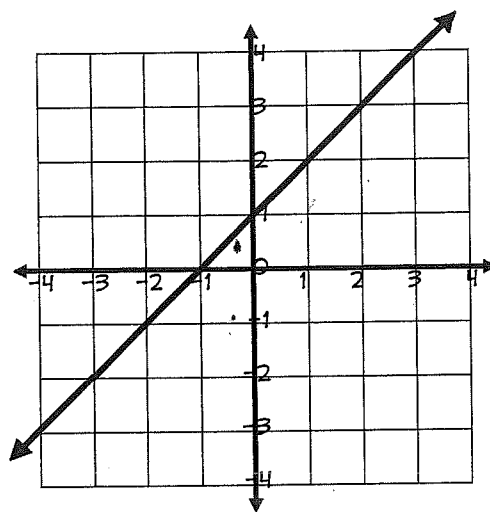
ABOUT:



Name \_\_\_\_\_

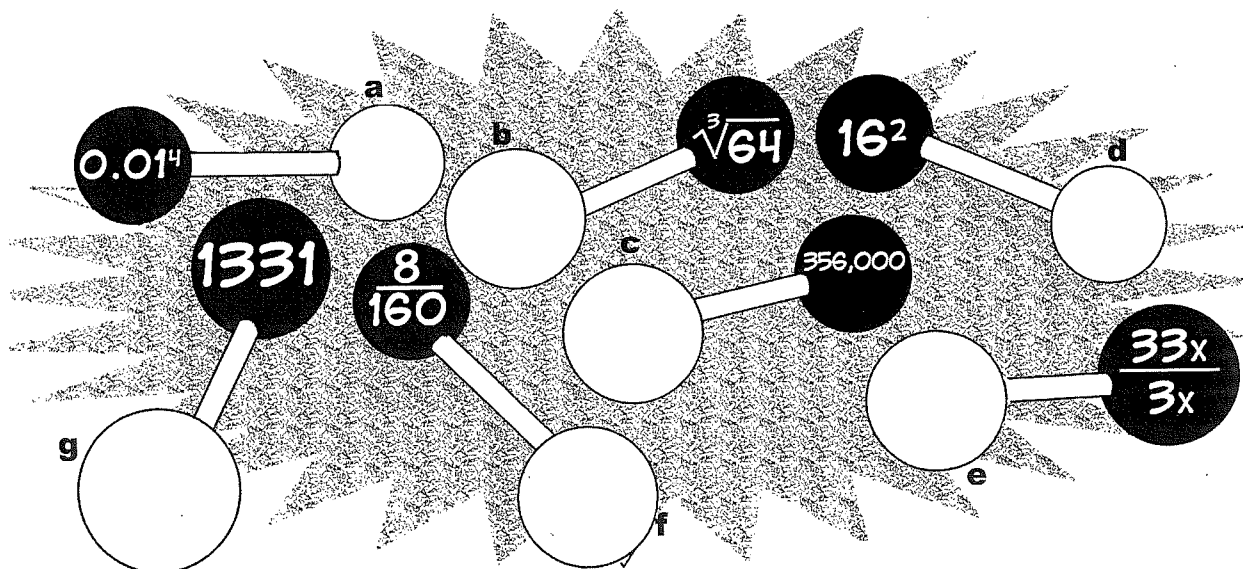
1. A man from Italy holds the record for smashing 22 watermelons with his head in one minute. If the volume of one of the spherical watermelons is 232 inches<sup>3</sup>, is it likely that the melon has a 6-inch radius?
2. Finish the sentence to show the distributive property:  
 $6x(x^2 + y - 3z) =$
3. Here are three of the final amounts of weight lifted by one competitor in four contests: 200.7 kg, 198.5 kg, and 236 kg. The total for the four contests was 835.2 kg. What is the mean of the four scores?

4. Is this a correct graph of the equation  
 $x - y + 1 = 0$ ?



## 5. Challenge Problem

Each barbell should hold two numbers that have the same value. Find each missing number among the numbers below and write it on the correct barbell.



2      4      8       $35.6 \times 10^5$       0.05      256      -256       $14x$   
 $0.000001$        $3.56 \times 10^5$        $11x$        $3x^2 + 11$       0.2  
 $11^3$        $\frac{1}{2}$        $0.000000001$        $3.46 \times 10^6$       11